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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,593

11/16/2006

Cord Bommelmann

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9145

286 7590 05/14/2008  
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EXAMINER

MAH, CHUCK Y

ART UNIT

PAPER NUMBER

3677

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/559,593	<b>Applicant(s)</b> BOMMELMANN ET AL.	
	<b>Examiner</b> Chuck Mah	<b>Art Unit</b> 3677	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 5,9,10,13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-8,11,12 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of figure 1(claims 1-4, 6-8, 11-12 and 15-17) in the reply filed on Mar. 7, 2008 is acknowledged. The traversal is on the ground(s) that the examiner has not adequately explained how the invention of claims 13 and 14, figures 3-4 is independent or distinct from figures 1-2, and that the restriction fails to offer sufficient justification regarding the burden on the examiner. This is not found persuasive because the restriction clearly states that the species are not obvious variants of each other and they have mutually exclusive characteristics as shown. And, examination all species would require different searches and different considerations of patentability.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4, 6-8, 11, 12, and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1,

line 2, it is unclear how "an axis" is structurally related to both the head piece and the lever. If only the "head piece" on each end had the "axis", the "head piece" would not be able to "swivel" relative to the lever.

lines 2-3, "two bodies...around an axis of rotation" is not understood. "in the swiveling movement" is not a structure.

Further, Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: at least how the claim is functionally and structurally related to the intended hinged members to perform hinging.

In claim 2, it is not clear what "the same transmission ratio" is referring to.

In claim 16, lines 2 and 4, it is not clear what structure "a first of its head piece" and "a second of it head pieces" are referring to and how they are related to the "head piece" stated in claim 1.

Further, line 3, "its first and second axes each coincide" is not understood.

In claim 17, it cannot be understood what the claim is meant. Note that "a horizontal orientation of the axes of rotation" is not a structural limitation.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3677

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 6-8, 11, 12 and 15-17, as best as understood, are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Lang et al. (US 6,997,504).

6. Claims 1-4, 6-8, 11, 12, 16 and 17, as best as understood, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Banks et al. (5,289,615). Note that '615 shows a lever 34, a belt or chain 32, head pieces 44, 54, and bodies 72, 84. Aircraft is a vehicle.

7. Claims 1-4, 6-8, 12 and 15-17, as best as understood, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by DE 19827813 A1. DE has a lever 11, two bodies (9.2, 13.1), tension members 14, head pieces (8.1, 8.2).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Banks et al. (5,289,615) in view of DE 19827813 A1.

'615 discloses the invention as claimed but for the tension members and the bodies being inside the hollow lever. DE teaches a similar hinge having a hollow lever containing the tension members and the bodies. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hinge of '615 with the tensions members and the bodies contained within a hollow lever as taught by DE, to conceal the hinge parts so that the hinge device can have an authentic appearance.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19827813 A1.

DE shows the tension members being a cable or a belt but not a chain. Examiner takes Official Notice the fact that a chain is known in the art to be equivalent to a cable or belt for use as a tension member. To substitute a chain in DE for the disclosed belt or cable would have been an obvious functional equivalent.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Mah whose telephone number is (571)272-7059. The examiner can normally be reached on 5/4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuck Mah/  
Primary Examiner, Art Unit 3677

CM